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June 25, 2003
B03/0271US IB/AT

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Abstract

The present invention relates to a container for uptaking, or storing, or releasing, or uptaking and storing, or uptaking and releasing, or storing and releasing, or uptaking, storing and releasing at least one gas, comprising at least one opening for allowing the at least one gas to enter and exit or at least one opening for allowing the at least one gas to enter and at least one opening for allowing the at least one gas to exit said container, and a gas-tight mechanism capable of storing the at least one gas under a pressure of from greater than 45 to 750 bar inside the container, said container further comprising a metallo-organic framework material comprising pores and at least one metal ion and at least one at least bidentate organic compound which is bound to said metal ion, as well as to a fuel cell comprising said container, and to a method of using said container or said fuel cell for supplying power to power plants, cars, trucks, busses, cell phones, and laptops.